Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please amend the claims to read as follows:

1. (Currently Amended) ~~an~~ An audio calibration system, comprising:

a control logic;

an input device coupled to said control logic;

a display coupled to said control logic;

a noise generator for generating a substantially random noise signal and coupled to said control logic;

a plurality of speakers coupled to said noise generator; and

delay modules coupled between said noise generator and said plurality of speakers for introducing time delays in the sound produced by the speakers,

wherein said control logic causes said display to display a visual image that indicates the relative position of a null line, wherein the position of the null line is determined by the time delays of the delay modules.

2. (Original) The audio calibration system of claim 1 wherein the substantially random noise signal has an auto correlation of 0.

3. (Original) The audio calibration system of claim 1 wherein the substantially random noise signal is pseudo-random.

4. (Original) The audio calibration system of claim 1 wherein said plurality of speakers includes five speakers.

5. (Canceled)

6. (Original) The audio calibration system of claim 1 wherein said input device is wirelessly coupled to said control logic.

7. (Currently Amended) ~~The audio calibration system of claim 1 further including~~ An audio calibration system, comprising:

a control logic;

an input device coupled to said control logic;

a display coupled to said control logic;

a noise generator for generating a substantially random noise signal and coupled to said control logic;

a plurality of speakers coupled to said noise generator;

delay modules coupled between said noise generator and said plurality of speakers for introducing time delays in the sound produced by the speakers; and

an inverter coupled between said noise generator and at least one delay module.

8. (Original) The audio calibration system of claim 7 further including a low pass filter coupled between said noise generator and said delay modules for low pass filtering the noise signal.

9. (Original) An audio calibration device, comprising:

a control logic;

an input device coupled to said control logic;

a noise generator for generating a substantially random noise signal and coupled to said control logic;

a low pass filter coupled to said noise generator for filtering the random noise signal from said noise generator;

an inverter coupled to said low pass filter;

a first delay module coupled to said inverter for introducing a time delay into an output signal from said inverter; and

a second delay module coupled to said low pass filter for introducing a time delay into an output signal from said filter, wherein said control logic controls the amount of time delay introduced by each delay module to thereby vary the location of a null line.

10. (Original) The audio calibration device of claim 9 further including a display unit coupled to the control logic for displaying a visual image indicative of the relative location of the null line.

11. (Currently Amended) The audio calibration device of claim 10, wherein said display ~~controller~~ unit includes an on-screen display controller implemented in a DVD decoder.

12. (Original) The audio calibration device of claim 10 further including a sound detector coupled to said control logic, said control logic determines the presence of the null line by processing an audio signal from said sound detector.

13. (Currently Amended) The audio calibration device of claim 10, wherein said noise ~~generation~~ generator and low pass filter are implemented using digital signal processing.

14. (Currently Amended) The audio calibration system of claim 10 further including speakers respectively coupled to said delay ~~module~~ modules.

15. (Canceled)

16. (Currently Amended) ~~The method of claim 15 further including:~~ A method for calibrating an audio system including multiple speakers, comprising:

    providing substantially random noise to a reference speaker and a first speaker;

    tuning a time delay to one of the speakers provided with substantially random noise to adjust the location of a null line caused by said reference and first speakers;

    providing substantially random noise to said reference speaker and a second speaker; and

    tuning a time delay to one of the reference or second speakers to adjust the location of a null line caused by said reference and second speakers.

17. (Original) The method of claim 16 further including:

    providing substantially random noise to said reference speaker and a third speaker; and

tuning a time delay to one of the reference or second speakers to adjust the location of a

null line caused by said reference and third speakers.

18. (Currently Amended) ~~The method of claim 15~~ A method for calibrating an audio system

including multiple speakers, comprising:

        providing substantially random noise to a reference speaker and a first speaker; and

        tuning a time delay to one of the speakers provided with substantially random noise to

adjust the location of a null line caused by said reference and first speakers, wherein said tuning

step includes:

                receiving an audio signal from a microphone; and

                processing said audio signal to determine a minimum amplitude level.

19. (Canceled)

20. (Currently Amended) ~~The audio calibration system of claim 19 further including~~ An audio

calibration system, including:

        a means for generating a substantially random noise signal;

        a delay means coupled to said noise signal generating means for introducing time delays

in the substantially random noise signal;

        a means for controlling the amount of time delay introduced by said delay means to

control the location of a null point; and

a filtering means coupled to said noise signal generating means for low pass filtering the

substantially random noise signal.

21. (Original) The audio calibration system of claim 20 further including a means for displaying

the relative location of the null point.

22.-24. (Canceled)